

What is claimed is:

- 1 1. A method of addressing a bistable liquid crystal material having incremental  
2 reflectance properties disposed between opposed substrates, wherein one substrate  
3 has a first plurality of electrodes deposited thereon facing the other substrate which  
4 has a second plurality of electrodes disposed thereon, the intersection of the first and  
5 second plurality of electrodes forming a plurality of pixels, the addressing method  
6 comprising:  
7       applying a predetermined number of pulses to the first plurality of  
8 electrodes;  
9       applying a like number of said predetermined number of pulses to the second  
10 plurality of electrodes; and  
11       each of said predetermined number of pulses having a different frequency.
- 1 2. The method according to claim 1, wherein said predetermined number of pulses are  
2 applied in a set period of time.
- 1 3. The method according to claim 2, further comprising:  
2       preparing said liquid crystal material by applying a preparation pulse to the  
3 first and second plurality of electrodes, prior to said applying steps.
- 1 4. The method according to claim 2, wherein each of said different frequency pulses  
2 are applied to the first and second plurality of electrodes at the same time.
- 1 5. The method according to claim 2, wherein the number of said predetermined  
2 number of pulses correspond to a different number of reflectances.
- 1 6. The method according to claim 2, wherein a number of reflectances at each pixel is  
2 equal to two raised to the number of said predetermined number of pulses less one,  
3 or less a constant value.
- 1 7. The method according to claim 2, wherein said pulses are bipolar.

- 1      8.      The method according to claim 2, wherein said pulses are unipolar.
- 1      9.      The method according to claim 2, wherein the number of said predetermined  
2      number of pulses is equal to a number of incremental reflectances.
- 1      10.     The method according to claim 9, wherein said number of incremental reflectances  
2      corresponds to a like number of drive periods, each said drive period having a  
3      different length of time than all other said drive periods.
- 1      11.     The method according to claim 2, wherein said number of said predetermined  
2      number of pulses is equal to an exponent number applied to two, wherein the  
3      exponent number corresponds to a number of pulses, plus one, or plus a constant  
4      value.
- 1      12.     The method according to claim 11, wherein said exponent number of pulses  
2      corresponds to a like number of drive periods, each said drive period having a  
3      different length of time, and wherein the additional pulse corresponds to a  
4      preparation pulse.
- 1      13.     The method according to claim 12, wherein the shortest drive period is about half  
2      the duration of the next longest drive period.
- 1      14.     The method according to claim 12, wherein each drive period is at least either about  
2      twice as long in duration as the next shortest drive period or about half as short in  
3      duration as the next longest drive period.
- 1      15.     A liquid crystal display, comprising:  
2                a pair of opposed substrates having disposed therebetween a liquid crystal  
3      material, one of said substrates having a first plurality of electrodes disposed thereon  
4      facing the other of said substrates which has a second plurality of electrodes,  
5      wherein the intersection of said first and second plurality of electrodes form a  
6      plurality of pixels; and

7                   a drive circuit that applies a predetermined number of pulses to said first  
8 plurality of electrodes and a like number of pulses to said second plurality of  
9 electrodes, each of said predetermined number of pulses having a different  
10 frequency.

1       16.     The liquid crystal display according to claim 15, wherein said drive circuit applies  
2 said predetermined number of pulses in a set period of time.

1       17.     The liquid crystal display according to claim 15, wherein said drive circuit applies  
2 each of said different frequency pulses to said first and second plurality of electrodes  
3 at the same time.

1       18.     The liquid crystal display according to claim 15, wherein said liquid crystal material  
2 has incremental reflectance properties and wherein the number of said  
3 predetermined number of pulses correspond to a different number of reflectances.

1       19.     The liquid crystal display according to claim 15, wherein said liquid crystal material  
2 has incremental reflectance properties and wherein the number of said  
3 predetermined number of pulses is equal to a number of incremental reflectances.

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